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ON

THE EXPERIMENTS OF DR CASIMIRO SPERINO,

OF TURIN,

ON THE SUBJECT OF SYPHILIZATION.

BY

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Dr Murchison read the following communication on the experiments of Dr Sperino on the inoculation of the syphilitic virus:—Many of the members of the Physiological Society are probably aware that the subject of syphilisation, or the inoculation of the syphilitic virus, is one, which for some time has been engaging the attention of several of the medical societies upon the Continent, and, among others, that of the Academy of Medicine of Paris. The experiments of John Hunter and M. Ricord had shown that inoculation might be employed as a test for distinguishing between primary and secondary syphilitic sores, true chancres developing themselves from the inoculation of the discharge taken from the former class of ulcers only; but a French physician, M. Auzias Turenne, was the first to announce the extraordinary fact, that the oftener the inoculation of matter from primary sores is repeated in the same individual, he gradually exhibits a less tendency to the reproduction of such sores, until at last the inoculation has no effect at all in producing them. The experiments which led M. Auzias Turenne to this extraordinary and important conclusion, were all made on the lower animals, principally monkeys, and they were detailed by him in a memoir on the subject laid before the Academy of Sciences of Paris, Nov. 18, 1850. Since then, similar experiments have been made on the human body by Dr Casimiro Sperino, who for a period of fourteen years has been the head surgeon of the “Regio Sifilicomio,” or Royal Syphilitic Hospital, in the neighbourhood of Turin, containing upwards of 200 beds, allotted entirely to females affected with syphilis, and who has therefore had ample opportunity of making himself thoroughly acquainted with this class of surgical diseases. On the 17th of last December I visited the Regio Sifilicomio in company with Dr Sperino, and, through the kindness of that gentleman, I there had an opportunity

of examining for myself upwards of thirty females who had been subjected to the process of syphilisation. In consequence of this visit, I have been induced to draw up the following short abstract of Dr Sperino's experiments and observations, as contained in a memoir entitled, "Sifilizzazione Nell' Uomo," read by him before the Medico-Chirurgical Society of Turin on the 23d of March 1851, and in another memoir bearing the same title, contained in the "Gazetta Medica Italiana" for the 8th of last November, hoping that it will be considered not unworthy of attention and consideration :—

In the first place, then, Dr Sperino states, that, previously to his having read of the experiments of M. Auzias Turenne, he had observed among the females admitted into the Regio Siflicomio, that the greater the number, the extent, and the duration of the primary sores, the less liability was there to the development of secondary symptoms. Thus town prostitutes, who were most liable to new infections, and to the most virulent sores, and who were admitted into the hospital several times in the course of one year for primary venereal ulcers, were very rarely found to become affected with secondary syphilis, while, on the contrary, prostitutes from the provinces affected with a single small primary ulcer almost invariably were attacked with secondary syphilis three or four months after the primary infection. Moreover, he had observed that in females affected with open buboes, in whom he had inoculated pus from the inguinal sores, in order to demonstrate their identity with the primary ulcers in the vulva, and in this way multiplied the number of ulcers, all of these, both the original and the artificial, quickly cicatrised, and no secondary symptoms manifested themselves.

Perceiving, as he thought, an analogy between these observations and the results of the experiments of M. Auzias Turenne, Dr Sperino undertook an extensive series of similar experiments upon the female patients of the Regio Siflicomio, the results of which he has published in the memoirs above-mentioned.

Every one of the females subjected to these experiments was already labouring under either primary or secondary syphilis. The matter which was inoculated was taken from a primary ulcer, situated either on the same or on another female, and presenting all the characters of an indurated "Hunterian chancre." The inoculation was made with the tip of a grooved lancet on some part of the chest or abdomen, at from three to six points at one time, and repeated once or twice in the week. The punctures were immediately covered over with a strip of adhesive plaster. On the third or fourth day a syphilitic pustule appeared at the side of each puncture, and on this bursting, an ulcer was developed with all the characters of the primary sore.

Now, Dr Sperino states that he has found in every case, without a single exception, that the first set of artificial sores were larger, deeper, more indurated, more inflamed, yielded more discharge, lasted longer, and left behind them larger cicatrices than the second set. Again, the second set of inoculations bore a similar relation to the third, the third to the fourth, and so on, until at last, after a series of inoculations (generally eight or ten), these no longer produced any effect, though repeated again and again in various parts of the body, with matter, which, in other females not previously inoculated, produced large primary ulcers. The number of inoculations necessary to produce this saturation with syphilis, or "*saturazione di sifilide*" as Dr Sperino expresses it, was found to vary considerably, but fewer were always required in the case of those females, who had for a long period been suffering from large chronic ulcers, than in those affected with small recent ulcers.

Dr Sperino also ascertained from numerous experiments, that the different characters of venereal sores, simple, indurated, and phagedænic, depended not on the quality of the inoculating virus, but on the condition and constitution of the individual, the same virus producing different sores in different individuals.

Dr Sperino states that no bad effect has ever followed these inoculations, provided care was in the first place taken to ascertain that no inflammatory process was going on in any part of the economy. The only resulting inconvenience, he says, is that of the unseemly cicatrices which the ulcers leave behind

them, an inconvenience, however, which he considers of little moment, and thinks may be quite disregarded, provided the inoculation is made in parts of the body not ordinarily exposed to view.

Dr Sperino, having thus confirmed the experiments of M. Turenne in reference to the human subject, proceeds to give some reasons for employing syphilization as a mode of cure for primary and constitutional syphilis. In all his experiments nothing but soothing applications was applied to the sores, and no constitutional treatment was had recourse to, with the exception of baths and cooling drinks, yet he found that the original primary ulcers, if recent and of small size, began to heal as soon as any of the artificial sores were established; while very large chronic indurated ulcers, which had lasted two or four years, and which had resisted courses of mercury and iodide of potassium, and repeated cauterizations with nitrate of silver, pernitrate of mercury, Vienna paste, and excision of the ulcerated surface, also quickly cicatrised after a few inoculations.

Time and careful observation of facts, Dr S. remarks, must decide how long this immunity from contracting syphilis will last, and whether or not the cure is a permanent and radical one. In reference to this point, he states in his memoir in the "Gazetta Medica Italiana," that, out of fifty females dismissed from the hospital, who had previously been subjected to the process of syphilization, seven only had returned, though formerly these patients had been admitted several times in the course of the twelve months. Of these seven, two only had contracted a fresh syphilitic ulcer, which in both cases was small, and not indurated. In one of these two, the process of syphilization had not been carried to its full extent, while the other had exhibited unusual obstinacy in taking on the immunity from infection. Moreover, Dr S. remarks that the number of patients in the hospital, which, from the commencement of 1850 up to June 1851, considerably exceeded two hundred, was, in November of last year, reduced to one hundred and twenty-six, without there being any other assignable cause for this extraordinary diminution, than the beneficial effects of the syphilization. He thus considers syphilization, not only as a mode of cure of syphilis already existing, but also as a preventative of secondary symptoms, and as a prophylactic against subsequent attacks.

The conclusions arrived at by Dr Sperino have met with great and decided opposition by some of the leading men in Paris, especially by M. Ricord and M. Diday; and M. Ricord indeed mentions a case in the "Gazette Medicale de Paris" for the 22d of last November, in which the oftener syphilization had been repeated, the greater had been the tendency of the ulcers to assume a phagedænic character. From only having had one opportunity of visiting the Regio Sifilicomio at Turin, it was of course impossible to satisfy myself of the validity of Dr Sperino's observations and experiments; yet, in justice to Dr S., I must remark that, from the examination of about thirty cases, I felt no doubt that the last inoculations produced far less inflammation and ulceration, and left behind them much smaller cicatrices, than any of the previous inoculations; so that I cannot refrain from thinking, that Dr Sperino has had some grounds for the startling propositions announced in his papers on syphilization. I greatly fear, however, that, even allowing all the observations of Dr S. should be ultimately confirmed and recognised (which is far from probable), very few patients would be found, who would allow their bodies to be disfigured by the numerous and often very large cicatrices, necessary to produce what he styles, a complete "saturation with syphilis."

During my residence in Turin, a committee had been appointed by the Medico-Chirurgical Society of that capital, to investigate Dr Sperino's experiments. The results of their investigations I have not heard; but as soon as they are communicated to me, I shall not fail to lay them before the Society. In the meantime, I think the subject is one of sufficient interest and importance to induce those who have the advantage of treating syphilis on the large scale, to repeat the experiments of Dr Sperino.

It would be interesting to ascertain how far it is to be attributed to the

syphilization alone, by instituting three sets of experiments:—Having recourse to syphilization only in one class of patients, as is the practice of Dr Sperino; combining it with the ordinary mode of treatment in a second class; and in a third class, applying only soothing applications to the sores, giving baths and cooling drinks, and attending to the general health. In this way we would be enabled to form some idea, as to whether Dr Sperino's success is attributable to his peculiar plan of practice, or to his abstaining from those remedies, which often do more harm than good in the treatment of syphilis.